GEORGIA INSTITUTE OF TECHNOLOGY SCHOOL OF ELECTRICAL & COMPUTER ENGINEERING Syllabus: ECE4370 Antenna Engineering

ECE4370 Antenna Engineering

TTh 12:00-1:15pm in Van Leer C340 Course Websites: T-square, <u>http://propagation.ece.gatech.edu/ECE4370/index.html</u>, YouTube[™] profdurgin

INSTRUCTOR INFORMATION:

Instructor	Email
Prof. Gregory D. Durgin	durgin at gatech.edu

Office Hours & Location TBD in Van Leer 507

COURSE INFORMATION Description

This course is a first-principles discovery of antenna design for a variety of wireless communication, radar, and power transfer systems.

Course Goals and Learning Outcomes

See website

Graded Components		
Assignments	Weight	
Homework	15%	
Midterm Quizzes (2) and Final	65%	
Final Project	20%	

Description of Graded Components

Expect approximately 7-8 homework assignments throughout the term, to be turned in during class or by email to the instructor/TA. There will be 2 in-class quizzes throughout the term and an additional comprehensive final exam. Of these three graded works, the highest two scores will count 25% each towards your final grade and the lowest score will count 15% towards your final grade. There is a final term project due at the end of the semester that demonstrates a culminating grasp of antennas and propagation understanding accrued during the course of the class. Projects will be assigned midway through the term and may involve group work.

For all assignments and projects, late work is not accepted. Special accommodations can be made for medical emergencies, interviewing, and other important events, but only if sufficient advance notice is given to (and permission granted by) the instructor ahead of time.

Grading Scale

This course uses a traditional A (>90.0), B (>80.0), C(>70.0), D(>60.0), F(<60.0) grade scale unless special circumstances require a curve to achieve the recommended course GPA as specified by the ECE course catalog. Traditionally, this course target GPA is 3.30. I do not curve *downward* from the traditional grade scale.

Classroom Management

This course will involve conventional classroom lectures delivered at the scheduled course times. There may also be supplemental content provided through videos and readings distributed online.

COURSE MATERIALS

Course Text: W.L. Stutzman and G.A. Thiele, *Antenna Theory and Design*, 3rd edition, John Wiley & Sons, 2013.

Additional Materials:

Additional notes and materials for this course will be disseminated through T-square. Some content videos are available on the "profdurgin" YouTube channel. Students may also find material on the course website useful for further study and practice.

COURSE EXPECTATIONS & GUIDELINES Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For information on Georgia Tech's Academic Honor Code, please visit http://www.catalog.gatech.edu/policies/honor-code/ or

<u>http://www.catalog.gatech.edu/rules/18/</u>. Any student suspected of cheating or plagiarizing on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Collaboration & Group Work

It is expected that each student upholds the Georgia Tech honor code when preparing work for this class. Everyone must turn in their own work (or group's work where specified) without contribution from another person or source, whether homework, project, or test. For homework assignments, discussion of topics and concepts are encouraged among students provided all submitted work is still original.

Student Use of Mobile Devices

Students may not use mobile devices during tests other than as calculators. Observations of violations during test periods will be reported to the Office of Student Integrity.

Accommodations for Individuals with Disabilities

If you are a student with learning needs that requires special accommodation, contact the Office of Disability Services at (404)894-2563 or <u>http://disabilityservices.gatech.edu/</u>, as soon as possible to make an appointment to discuss your special needs and to obtain an accommodation letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Student-Faculty Expectations

At Georgia Tech we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. See http://www.catalog.gatech.edu/rules/22/ for an articulation of some basic expectation that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.

